

STATE OF ILLINOIS



ILLINOIS COMMERCE COMMISSION TRANSPORTATION DIVISION / RAIL SAFETY SECTION

Michael E. Stead

Rail Safety Program Administrator

January 24, 2005

Mr. Tom Andryuk
Manager Field Engineering
Union Pacific Railroad Company
500 West Madison Street / Suite 3610
Chicago, IL 60661

Dear Mr. Andryuk:

This will acknowledge receipt of Union Pacific Railroad Company's Form 1 petition and Form 2 notice concerning the proposed installation of CRTU monitoring device at the following grade crossing.

City / RR Station	Street	DOT Number	County	Date Additional Info Received
Waukegan	Madison Street	176 624D	Lake	January 5, 2005

We have no objection to the proposed changes.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael E. Stead", with a small "CB" monogram to the right.

Michael E. Stead
Rail Safety Program
Administrator

rlb

UNION PACIFIC RAILROAD COMPANY

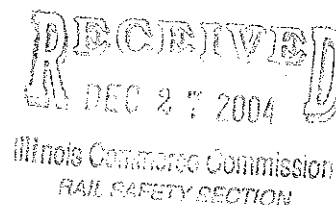
ENGINEERING DEPARTMENT
COMMUTER OPERATIONS



500 WEST MADISON STREET
SUITE 3610
CHICAGO, ILLINOIS 60661
(312) 496-4750

December 21, 2004

Mr. David Lazarides
Director of Processing
Transportation Division
Illinois Commerce Commission
527 East Capitol Avenue
Springfield, IL 62706



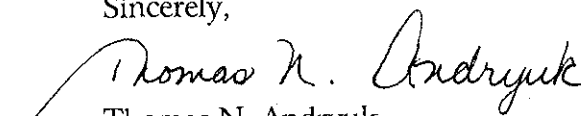
Re: DOT #176 624d, Madison St, Waukegan, IL

Dear Sir:

Enclosed is the Form 1 requesting a minor change and Form 2 confirming completion of this change for the attached referenced crossing. Circuit plans are also included.

These locations are part of the CRTU Project on the Union Pacific Railroad authorized under Stipulated Agreement 946 with ICC Order T00-0095.

Sincerely,


Thomas N. Andryuk
Manager of Field Engineering

TNA:aes
cc: M. Shumate
Operating Files

Lazarides13.tna

STATE OF ILLINOIS
Illinois Commerce Commission
Transportation Division

RECEIVED
DEC 21 2004

Form 1

Notice of proposed minor change in crossing
protection under 92 Illinois Administrative
Code 1535.400 (b) and (c).

Illinois Commerce Commission
RAIL SAFETY SECTION

Date: DECEMBER 21, 2004

To the Illinois Commerce Commission:

The UNION PACIFIC RAILROAD hereby gives
(name of railroad company)

notice that it proposes to make a change, designated as a minor change under 92 Illinois Administrative Code
1535.400 (b) and (c) in crossing Number 176 6240 located near WAUKEGAN,
(city or village)

being the crossing of MADISON ST., with
(name of street, or highway, if any)

KENOSHA SUB. A full statement of the proposed
(designation of tracks or lines to be crossed)

changes are as follows:

INSTALL CRTU

UNION PACIFIC

(Railroad Company)

By Roman N. Andryuk
(Attach additional sheet if necessary)

Completion of this form is necessary to accomplish the statutory purpose as outlined in the Illinois Commercial Transportation
Law, Section 18c-7401. This form has been approved by Forms Management Center.

STATE OF ILLINOIS
Illinois Commerce Commission
Transportation Division

RECEIVED Form 2
DEC 21 2004

Illinois Commerce Commission
RAIL SAFETY SECTION

Notice of completion of minor change in crossing
protection under 92 Illinois Administrative
Code 1535.400(c)

Date: DECEMBER 21, 2004

To the Illinois Commerce Commission:

The UNION PACIFIC RAILROAD hereby gives
(name of railroad company)

notice that on 5-26-2004 it completed the making of a minor change at
(date)

crossing Number 176 624 D in accordance with the notice proposing such change given

to this Commission on DEC. 21, 2004
(date)

UNION PACIFIC
(Railroad Company)

By Roman N. Andryuk

Completion of this form is necessary to accomplish the statutory purpose as outlined in the Illinois Commercial Transportation Law, Section 18c-7401. This form has been approved by Forms Management Center.

524-0113

G:\LAW\CONTRACT\C18131.002

cc207/25

Illinois Commerce Commission
RAIL SAFETY SECTION

WAUKEGAN, ILLINDIS
MADISON STREET
M.P. 35.9
KENDISHA SUBDIVISION
D.O.T.#176 6247

**N. PACIFIC RAILROAD
FRANCIS, WISCONSIN
CHICAGO, ILLINOIS
A.T.S. CIRCUITS**

MESS: WITT DND
WITC: WITT DND
38K: EML
J.F.E. 3327
D: KERO359X-D110

EL			

MODIFICATION 1
LEVEL CHK'D.
ALL MOD. THIS TYP. BY DESIGNER
FROM TYP. 2 Y/N

CRUY	Q.A. LAST
	LAST 1
	LAST 2
	CHANGES

REV. 11-9
INSTALL
W.O.* 33
REC- 94
5-26-04
JRA/MIT



1

[illegible]

--	--

1000

NOTES:

- ALL DIODES IN5060 OR IN4004 UNLESS OTHERWISE NOTED.
- * MOUNT ANTENNA ON TOP OF HOUSE.
- ALL WIRES #18 UNLESS OTHERWISE NOTED.
- ALL UNUSED 'AC' INPUTS MUST BE TIED HIGH TO BATTERY
- ALL UNUSED ANALOG INPUTS MUST BE TIED HIGH TO BATTERY
- ALL UNUSED 'MD' INPUTS MUST BE DISCONNECTED
- NORMAL STATE FOR ANALOG CHANNELS IS EQUAL TO THE
- CRTU FRONT PANEL DISPLAY CHART. INDICATES NORMAL STATE
- DIGITAL INPUT HIGH OR LOW
- POWER FAIL INPUT CLOSED
- POWER FAIL INPUT OPEN

LATCH IS SET BECAUSE CRTU
DETECTED AN ALARM CONDITION

12.08V L

↑
"RUN MODE"
↑

"RUN MODE- SILENT"
↑
CRTU RADIO IS DISABLED.
REPROGRAM CRTU WITH LAPTOP.

ANALOG AND AC INPUT MODULES MUST BE MOUNTED LESS THAN
12" FROM CRTU

```
'sRUN MODE' 'sRUN MODE-SILENT'
```

ANALOG AND AC INPUT MODULES MUST BE MOUNTED LESS THAN 12" FROM CRTU

MAINTENANCE OPERATIONS

CHANNEL SETUP - STANDARD CONFIGURATION 15:XR,LP₀,ISL,BA

UNIT INSTALLATION AND SETUP

—

[illegible]

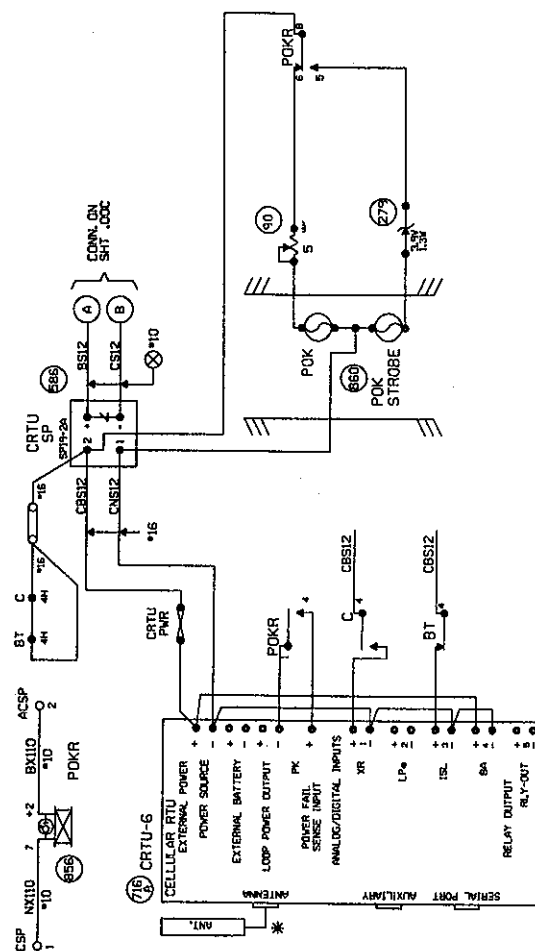
ALARM CRITERIA		EVENT LOGGING ENABLED OPTIONS	
ID	N/A		
ID	N/A		
ID	N/A		
ID	N/A		
ID	N/A		DIGITAL EVENTS
ID	N/A		CH-RR CIG-TSL
ID	N/A		
STORED ANALOG VOLTAGE		SAMPLED ANALOG VOLTAGE	
13.45			13.45
13.50			13.47

CHARTS REV'D 3-2-00

[illegible]

SENSE FUNCTION	NAME FUNCTION	RECORDING STATUS	RECORDING VALUE	RECORDING UNIT	RECORDING STATUS	RECORDING VALUE	RECORDING UNIT
POWER ON/OFF	PS-ON AC POWER FAIL	ACTIVE	7.200	ALARM	ACTIVE	7.200	ALARM
DIGITAL INPUT	CH-DIR CH-DIR TO LONG		1.600	ALARM		1.600	ALARM
DIGITAL INPUT	CH2-LF CLOSURE OUT UP/DOWN SING CHTRLR FAILED		120	ALARM		120	ALARM
DIGITAL INPUT	CH3-ISI ISLAND ISOLATED WARNING TIME	1	ACTIVE		1	ACTIVE	
DIGITAL INPUT	CH4-BAT BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-1 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-2 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-3 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-4 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-5 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-6 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-7 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-8 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-9 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-10 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-11 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-12 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-13 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-14 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-15 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-16 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-17 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-18 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-19 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-20 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-21 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-22 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-23 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-24 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-25 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-26 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-27 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-28 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-29 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-30 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-31 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-32 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-33 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-34 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-35 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-36 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-37 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-38 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-39 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-40 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-41 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-42 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-43 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-44 BATTERY MONITOR		300	ALARM		300	ALARM
DIGITAL INPUT	PS-BAT-45 BATTERY MONITOR		300	ALARM			

[illegible][illegible]



**MOUNT CRTU AT LEAST 18" AWAY
FROM HIGH VOLTAGE POWER SOURCES**

UNIT INSTALLATION AND SETUP

—

Bergeron, Rodney

From: TNANDRYU@up.com
Sent: Wednesday, January 05, 2005 3:01 PM
To: Bergeron, Rodney
Subject: Re: FW: 176624D - Madison Street, Waukegan, IL



pic23986.gif



176624D
son Street mark

FYI...

"Bergeron,
Rodney"
<rbergero@icc.sta
te.il.us>

To: <TNANDRYU@up.com>
cc:
Subject: FW: 176624D - Madison Street, Waukegan,

IL

01/05/05 11:01 AM

Tom, your attachment is of the UP logo only?

-----Original Message-----

From: TNANDRYU@up.com [mailto:TNANDRYU@up.com]
Sent: Wednesday, January 05, 2005 10:54 AM
To: Bergeron, Rodney
Subject: Re: 176624D - Madison Street, Waukegan, IL

Rod:

I neglected to include the operating rule in my previous note. It is attached below for your information.

----- Forwarded by Tom N. Andryuk on 01/05/05 10:49 AM -----

Tom J. Moran

To: Tom N. Andryuk@UP

01/03/05 01:45 PM

cc: Jim N. Murphy@UP,

Richard B. Free@UP

Subject: Re: 176624D -

Madison Street, Waukegan, IL(Document link: Tom N. Andryuk)

The rule that covers movement over this crossing, which is on a Yard track in Waukegan, is copied below. This crossing is considered other than main track or siding.

(Embedded

image moved

to file:

Union Pacific Rules

pic23986.gif)

6.32.2

Automatic Warning

Devices

Under any of the following conditions, a movement must not foul a crossing equipped with automatic warning devices until the device has been operating long enough to provide warning and the crossing gates, if equipped, are fully lowered:

Movement has been delayed or stopped within 3,000 feet of the crossing.

Movement is within 3,000 feet of the crossing and speed has increased by more than 5 MPH.

Movement is closely following another movement.

Movement is on other than the main track or siding.

or

Movement enters a main track or siding within 3,000 feet of the crossing.

|

|

| Employees must observe all automatic crossing warning devices and report any that are malfunctioning to the train dispatcher or proper authority by the first available means of communication. Notify all affected trains as soon as possible.

|

|

Report malfunctioning automatic crossing warning devices to the train dispatcher or to the Grade Crossing Safety Hot Line (800-848-8715) by the first available means of communication. If equipped, when the white

power-on light on the exterior of the signal house is not lit or when a strobe light on the exterior of the signal house is flashing, immediately notify the train dispatcher or the Grade Crossing Safety Hot Line.

On a prior SP territory track where a "STOP" sign is located next to a road crossing, movement must stop at "STOP" sign. Movement may proceed only after automatic crossing warning devices have been operating long enough to provide warning and crossing gates, if equipped, are fully lowered. If automatic crossing warning devices fail to operate, movement may enter the crossing only after a crew member is on the ground at the crossing to warn highway traffic.

In the application of Part A of this rule: A crossing having a broken gate(s) is to be considered as having working devices when the balance of the automatic warning devices are seen to be working. Movement may proceed over the crossing at 15 MPH without stopping.

A. Automatic Warning Devices Malfunctioning

Use the following table to properly complete movement over the crossing:

Movement When Automatic Warning Devices Are Malfunctioning	
If	Then
Someone is not at the crossing to provide warning	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing on hand signals from that crew member, or If devices are seen to be working or when relieved by the train dispatcher, proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing is protected by 1 equipped flagger who is unable to protect the crossing in all directions of approaching traffic	Proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing is protected by 1 or more equipped flaggers who are able to protect the crossing in all directions of approaching traffic	Proceed over the crossing at normal speed without stopping.
NOTE: An equipped flagger is a person other	

than a crew member who is equipped with an orange vest, orange shirt, or orange jacket. At night, the vest, shirt, or jacket must be fluorescent. The flagger must have a red flag or stop paddle at day, and white light at night.

When advised by the train dispatcher or proper authority that the malfunctioning automatic warning devices have been repaired, these restrictions no longer apply.

B. Whistle for Crossing

When notified that automatic warning devices are malfunctioning, sound whistle signal 5.8.2(11) regardless of any prohibition.

Copyright 1869 - 2004 Union Pacific Railroad Company

Tom N. Andryuk

01/03/2005 08:16
Free@UP, Tom J. Moran@UP
AM
Street, Waukegan, IL

To: Jim N. Murphy@UP
cc: Richard B.
Subject: 176624D - Madison

Jim;

Please see Bergeron's note below and advise appropriate course of action.

----- Forwarded by Tom N. Andryuk on 01/03/05 08:15 AM -----

"Bergeron,

Rodney"
\"(E-mail\)\" <TNANDRYU@up.com>
<rbergero@icc.sta
te.il.us>
Street, Waukegan, IL

To: "Thomas Andryuk
cc:
Subject: 176624D - Madison

12/30/04 12:17 PM

Tom,

The approaches for this crossing will not meet Fray's 234.225 (in no event shall it provide less than 20 seconds warning time for the normal operation of through trains before the grade crossing is occupied by rail traffic).

See attached plans. <<176624D Madison Street markup.pdf>>

Please revise plans showing appropriate approach lengths allowing for FRA's 20 second minimum plus equipment reaction time and train speed variances, or should this crossing be govern by an operating rules please provide our office with a copy of this operating rule.

Appreciate your help, Rod (See attached file: 176624D Madison Street markup.pdf)

(See attached file: pic23986.gif) (See attached file: 176624D Madison Street markup.pdf)

- (b) The train is made up entirely of double stack well cars and/or five-platform articulated single-level spine cars, regardless of trailing tonnage.
- (4) The train had no harsh slack action while stopping from the emergency brake application,
- (5) The end of train telemetry device or caboose gauge shows that the brake pipe pressure on the rear car is restored,
- (6) A brake pipe leakage test (or air flow indicator gauge) on freight trains is within proper limits,
- (7) The train does not require excessive power to start after stopping.
- and**
- (8) The 2-way EOT device "Emergency" toggle switch was not operated.

If the train does not meet all eight conditions, inspect as outlined in the paragraph above.

6.25 Movement Against the Current of Traffic

Add:

- Rule 9.17.1 (Signal Protection in ABS by Lining Switch)

6.26 Use of Multiple Main Tracks

Multiple main tracks are numbered as follows:

- On east-west subdivisions, track numbers increase from north to south, and the northern most track is No. 1, and
- On north-south subdivisions, track numbers increase from west to east, and the western most track is No. 1.

6.28 Movement on Other than Main Track

This rule is in effect on all industrial leads unless the subdivision page states otherwise.

6.29.1 Inspecting Passing Trains

Change section titled "Ground Inspections" to read:

When a train is stopped and is met or passed by another train, crew members must inspect the passing train. The trainman's inspection must be made from the ground if there is a safe location. If safe to do so, a trainman must cross the track and inspect the side of the passing train opposite the stopped train. However, during snow and icy conditions, crew members may remain in the locomotive cab when inspecting passing trains.

6.30 Receiving or Discharging Passengers

Add:

Passenger Crew Responsibilities: When approaching a station to receive or discharge passengers, decide if the train is routing on the track nearest the station platform. If other trains could pass on an adjacent track between the passenger train and the station platform, call the train dispatcher. Find out that no trains or engines will use the adjacent track. If trains are approaching on the adjacent track, delay arrival until the other train or engine has stopped or is clear of the station platform.

Other Crews Responsibilities: Do not pass between a passenger train that receives or discharges traffic until all passengers and employees have cleared the track between the passenger train and the station platform. Then, pass only when preceded by an employee walking just ahead of the movement.

6.32.2 Automatic Crossing Devices

Change rule title to read "Automatic Warning Device"

Delete first paragraph.

Change second paragraph to read as follows:

Under any of the following conditions, a movement must not foul a crossing equipped with automatic warning devices until the device has been operating long enough to provide warning and

the crossing gates, if equipped, are fully lowered:

- Movement has stopped within 3,000 feet of the crossing.
- Movement is within 3,000 feet of the crossing and speed has increased by more than 5 MPH.
- Movement is closely following another movement.
- Movement is on other than a main track or siding.
- or
- Movement enters a main track or siding within 3,000 feet of the crossing

Add a sentence following the table in part A to read:

When advised by the train dispatcher or proper authority that the malfunctioning automatic warning devices have been repaired, these restrictions no longer apply.

Report malfunctioning automatic crossing warning devices to the train dispatcher or to the Grade Crossing Safety Hot Line (800-848-8715) by the first available means of communication. If equipped, when the white power-on light on the exterior of the signal house is not lit, or when a strobe light on the exterior of the signal house is not lit, or when a strobe light on the exterior of the signal house is flashing, immediately notify the train dispatcher or Grade Crossing Safety Hot Line.

On a prior SP territory track where a "STOP" sign is located next to a road crossing, movement must stop at "STOP" sign. Movement may proceed only after automatic crossing warning devices have been operating long enough to provide warning and crossing gates, if equipped, are fully lowered. If automatic crossing warning devices fail to operate, movement may enter the crossing only after a crew member is on the ground at the crossing to warn highway traffic.

In the application of Part A of this rule: A crossing having a broken gate(s) is to be considered as having working devices when the balance of the automatic warning devices are seen to be working. Movement may proceed over the crossing at 15 MPH without stopping.

6.32.4 Clear of Crossings and Signal Circuits

Change second paragraph to read:

When practical, avoid leaving cars, engines, or equipment standing closer than 250 feet from the road crossing when there is an adjacent track.

Referring to the second paragraph: In the State of Illinois, the distance is 500 feet; in the State of Wisconsin, the distance is 330 feet; and, in the States of Arkansas, Kansas, and Louisiana the distance is 300 feet.

7.3 Additional Switching Precautions

Add to the list of equipment that must not be cut off in motion or struck by any car moving under its own momentum:

- Articulated and solid drawbar-connected cars with more than two car bodies. However, when empty, these cars may be kicked but not humped.
- Scale test cars.
- Roadway equipment.

7.7 Kicking or Dropping Cars

Change first paragraph to read:

Kicking or dropping cars is permitted only when it will not endanger employees, equipment, or contents of cars. Dropping cars is permitted only on territory where specifically authorized.

7.7.1 Gravity Switch Moves

Add new rule to read as follows:

Unless otherwise restricted, a gravity switch move can be utilized where cars must be repositioned on the opposite end of the engine. Not more than five cars may be handled at one time in this manner, and only with sufficient hand brakes manned by crew members to insure that the movement